

**AMENDMENTS TO THE ELECTRICITY DISTRIBUTION CODE:  
TECHNICAL AMENDMENTS AND REFERENCE DOCUMENTS  
UPDATES**

**3 DECEMBER 2019**

**Amendments made by the Essential Services Commission on 3/12/2019**

**1 Nature and commencement of this instrument**

- (1) This instrument amends the Electricity Distribution Code.
- (2) This instrument comes into operation on 31 March 2020.

**2 Table of amendments**

**Clause 1—This code**

- (1) In clause 1.2, at the end of the clause insert new paragraph:

Version 11 amendments to this Code will take effect on 31 March 2020.

**Clause 3—Asset management**

- (2) In clause 3.5.1 after “detailing” delete “how it plans over the following five calendar years”.
- (3) In clause 3.5.1(a) before “to” insert “how it plans over the following five calendar years”.
- (4) In clause 3.5.1(b):
  - a. before “to” insert “how it plans over the following five calendar years”;
  - b. delete “and”.

(5) In clause 3.5.1(c):

- a. before “to” insert “how it plans over the following five calendar years”;
- b. delete “.” and insert “;”.

(6) In clause 3.5.1(d):

- a. before “to” insert “how it plans over the following five calendar years”;
- b. delete “.” and insert “;”.

(7) After clause 3.5.1(d) insert new clause (e):

- (e) its use of *advanced metering infrastructure* technology.

(8) After clause 3.5.3B insert new clause 3.5.3C:

3.5.3C In fulfilling the requirements of clause 3.5.1(e), the report must include the following information:

- (a) how *advanced metering infrastructure* information is being used to better support life support customers;
- (b) how *advanced metering infrastructure* information is being used to guide network planning and demand side response initiatives;
- (c) how *advanced metering infrastructure* information is being used to support network reliability initiatives; and
- (d) the distribution power system power quality information described in schedule 1.

**Clause 4—Quality of supply**

(9) In clause 4.2.1 delete “*Electricity Safety (Network Assets) Regulations 1999*” and insert “*Electricity Safety (General) Regulations 2019*”.

(10) In clause 4.2.2 delete Table 1 and insert:

**Table 1**

<b>STANDARD NOMINAL VOLTAGE VARIATIONS</b>					
	Voltage Level in kV	Voltage Range for Time Periods			Impulse Voltage
		Steady State	Less than 1 minute	Less than 10 seconds	
1	< 1	AS 61000.3.100*			6 kV peak
2		+ 13% - 10%		Phase to Earth +50%, -100% Phase to Phase +20%, -100%	
3	1-6.6	± 6 %	± 10%	Phase to Earth +80%, -100% Phase to Phase +20%, -100%	60 kV peak
4	11	(± 10 %			95 kV peak
5	22	Rural Areas)			150 kV peak
6	66	± 10%	± 15%	Phase to Earth +50%, -100% Phase to Phase +20%, -100%	325 kV peak

Notes:

\* The voltage range for time periods less than 1 minute and 10 seconds do not apply to AS 61000.3.100

For the purposes of clause 4.2.7, rows 2 to 6 applies

(11) In clause 4.2.3 delete “*IEC 60364-4-443*” and insert “*IEC 60364-4-44*”.

(12) In clause 4.2.4 after “minute” insert “(other than in respect of AS 61000.3.100 where the time period of less than one minute does not apply)”.

(13) In clause 4.2.5 delete “*IEC 1000-2-2*” and insert “AS/NZ 61000.2.2”.

- (14) In clause 4.2.6:
- a. in the first dot point after the semi-colon delete “and”;
  - b. in the second dot point delete “.” and insert “;”;
  - c. insert the following dot point:
    - the *voltages* and *voltage* variations in accordance with AS61000.3.100 using *advanced metering infrastructure* information.
- (15) In clause 4.2.7:
- a. after “by” insert “rows 2 to 6 of”;
  - b. delete “and Table 1A”.
- (16) In clause 4.2.7, footnote 1 before “Clause 4.2.7” insert new sentence:
- Guideline 11 – Voltage variation compensation.
- (17) In clause 4.3.5, Table 2, in the second column of the row commencing “<6.6” delete “0.75” and insert “0.8”.
- (18) In clause 4.4.1 delete “Table 3” and insert “by the system standard set out in clause S5.1a.6 of the *NER*”.
- (19) In clause 4.4.1 delete Table 3 and insert “Table 3 - Not used”.
- (20) In clause 4.4.2 delete the text appearing from “*IEEE*” and insert “*Australian Standard TR IEC 61000.3.6-2012 ‘Electromagnetic compatibility: Limits – Assessment of emission limits for the connection of distorting installations to MV, HV and EHV power systems’.*”
- (21) In clause 4.4.3 delete “*IEEE* Standard 519-1992” and insert “*IEEE* Standard 519-2014”.

- (22) In clause 4.5.1 delete “AS/NZ 2344-1997” and insert “AS/NZ 2344-2016”.
- (23) In clause 4.6.1:
- a. delete “Subject to clause 4.6.2 a” and insert “A”;
  - b. delete “at a level at or less than 1%” and insert “in accordance with the system standard in clause S5.1a.7 of the *NER*”.
- (24) In clause 4.6.2 delete the text and insert “Not used.”.
- (25) In clause 4.8.1 delete the text appearing after “in” and insert “accordance with the system standards set out in clause S5.1a.5 of the *NER*”.
- (26) In clause 4.8.2 delete the text and insert “Not used.”.
- (27) In clause 4.9 after “clause 3.1” insert “and clause 4.2.6”.

#### **Clause 7—Embedded generators**

- (28) In clause 7.5 delete “is less than 1%” and insert “does not vary other than in accordance with the system standard set out in clause S5.1a.7 of the *NER*”.
- (29) In clause 7.6.2 delete “*IEEE* Standard 519-1992” and insert “*IEEE* Standard 519-2014”.
- (30) In clause 7.7 delete “AS/NZ 2344-1997” and insert “AS/NZ 2344-2016”.
- (31) In clause 7.9 delete the text from “As a minimum” to the end of the clause and insert:

This record must include all of the information a *distributor* is required to provide to *AEMO* pursuant to rule 3.7E of the *NER*.

**Clause 8—Emergency response plans**

(32) In clause 8.2:

- a. delete “dated October 2009”;
- b. delete “Single Industry Spokesperson Process in Victoria” and insert “Single Industry Spokesperson Protocol for Electricity in Victoria”.

**Clause 10—Complaints and dispute resolution**

(33) In clause 10.1.1:

- a. after “Schemes” insert “(as revised or replaced from time to time)”;
- b. in footnote 2 delete the text and insert “Most recently published by the Australian Government in February 2015”.

**Clause 16—Liability**

(34) In clause 16(b)(1) after “by section” delete the text from and including “68A” to and including “(Vic)” and insert: “64A of the Australian Consumer Law (Schedule 2 to the *Competition and Consumer Act 2010* (Cth)) and the Australian Consumer Law (Victoria)”.

(35) In clause 16(b)(3):

- a. after “of” delete “section 117 of the *Act* or”;
- b. delete “78” and insert “120”.

(36) In clause 18(e):

- a. after “of” delete “section 117 of the *Act* or”;
- b. delete “78” and insert “120”.

## Clause 19—Definitions

(37) After the definition of “*AEMO*” insert new definition:

*advanced metering infrastructure* has the meaning given to it in section 46B of the Act.

(38) In the definition of “*approved statement of charges*” delete the text after “*charges*” and insert “means the charges a *distributor* is permitted to levy pursuant to the distribution determination made by the *AER* for that *distributor*.”.

(39) In the definition of “*AER*” delete “*Trade Practices Act 1974 (Cth)*” and insert “*Competition and Consumer Act 2010 (Cth)*”.

(40) Delete the definition of “*avoided costs*”.

(41) In the definition of “*demand*” after “over a” insert “five,”.

(42) In the definition of “*electrician*” in (a) and (b) delete “*Electricity Safety (Installations) Regulations 1999*” and insert “*Electricity Safety (Registration and Licensing) Regulations 2010*”.

(43) In the definition of “*generating unit*” delete the text after “means” and insert “the plant used in the production of electricity and all related equipment essential to its functioning as a single entity.”

(44) After the definition of “*Melbourne CBD distributor*” insert new definition:

*Meter* means a device complying with the *metering code* which measures and records the production or consumption of electrical energy.

(45) In the definition of “*Metrology Procedure*”:

- a. delete “Victorian Electricity Supply Industry”;

b. after “published” insert “by *AEMO*”.

(46) In the definition of “*price determination*”:

a. after “other price” insert “and/or revenue”;

b. after “force” insert “applying to a *distributor*”.

(47) In the definition of “*Regulatory test*”:

a. after “the regulatory” insert “investment”;

b. delete “clause 5.6.5A” and insert “rule 5.17”.

(48) In clause 20.1.3(a):

a. after “headings” insert “and footnotes”;

b. after “convenience” insert “or information”.

#### **Clause 22 (new)—Schedule 1**

(49) Insert a Schedule entitled “Schedule 1” as follows:

## 22. SCHEDULE 1

In accordance with clause 3.5.1 and 3.5.4, a *distributor* is required to publish annual information and to include in that information the *distribution system* power quality information in accordance with this schedule.

A *distributor* is required to publish the categories of information identified in Table 6 for each calendar year.

The aggregated 10 minute averaged data used for Table 6 must be available in an accessible format (such as spreadsheet) separate to the Distribution System Planning Report.

**Table 6**

Distribution Voltage Information												
Zone substation name	Feeder ID / name	Feeder category	Feeder classification	Section 1								Section 2 – 10 <sup>3</sup>
				Advanced Metering Infrastructure (AMI) voltage information <sup>1</sup> Section information <sup>2</sup>								Repeat section 1 information
		Shortest, longest and nominated feeder <sup>4</sup>	(Urban, short or long rural)	1 January – 31 March		1 April – 30 June		1 July – 30 September		1 October – 31 December		
				6am - 12pm		6am - 12pm		6am - 12pm		6am - 12pm		
				12pm - 6pm		12pm - 6pm		12pm - 6pm		12pm - 6pm		
				6pm - 12am		6pm - 12am		6pm - 12am		6pm - 12am		
				12am - 6am		12am - 6am		12am - 6am		12am - 6am		

The following requirements apply to the information required to be published:

1. The voltage data to be published is the 10-minute averaged voltage data over 3 months (for each time period identified in Table 6) of the aggregated ***advanced metering infrastructure*** population for the section.
2. Section information must include:
  - (a) geographic location details (for example: closest street name and suburb, landmark identifiers or GPS coordinates)
  - (b) length (km)
  - (c) number of ***customers*** supplied by the relevant feeder section
  - (d) percentage of customers identified in 0 with a ***small embedded generator***
  - (e) any device or equipment deployed within the section to regulate voltage (for example: voltage regulators)
3. Each feeder section must comprise 1/10<sup>th</sup> of the total feeder length.
4. Each reporting year must include the shortest and longest feeder, together with one other feeder. Where a reporting cycle is (in years) the number of feeders minus 2, every feeder other than the shortest and longest feeder must appear once (and only once) in that reporting cycle.
5. For the purpose of table 6, the feeder category is defined as the feeder which is operating in its system normal configuration which is the feeder that has:
  - (a) the shortest electrical length for a zone substation
  - (b) the longest electrical length for a zone substation
  - (c) the other feeder to be included in the reporting pursuant to 4.
6. The data is to be published on the ***distributor's*** website as a rolling 5 year report of the information in table 6.